## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017846 Address: 333 Burma Road **Date Inspected:** 02-Oct-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Zhu Zhong Hai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

## **OBG # TRIAL ASSEMBLY YARD**

Segment # 10BE ~ 10CE

Repair Welding.

This QA inspector observed, ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE10C-003; The Critical Welding Repair Report (CWRR) was B-CWR1968.ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-1G (1F) FCM-Repair-1.See the attached Photo.

#### CB#14

This QA inspector observed, ZPMC qualified welding personnel identified as 040759 perform Flux Core Arc Welding (FCAW), weld joint identified as CA202A-014-006; ZPMC CWI is identified as Mr. Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2232-TC-U4b-F.

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#### Segment # 10CE

This QA inspector observed, ZPMC qualified welding personnel identified as 040458 perform Flux Core Arc Welding (FCAW), weld joint identified as SP633-001-045; ZPMC CWI is identified as Mr. Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

#### Segment # 11BE

This QA inspector observed, ZPMC qualified welding personnel identified as 040609 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG068A-028; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-TC-U4b-FCM-1.

## Segment # 11AE ~ 11BE

This QA inspector observed, ZPMC qualified welding personnel identified as 067752 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA082-001; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-TC-U4b-FCM-1.

#### Segment #10BW

Repair Welding.

This QA inspector observed, ZPMC qualified welding personnel identified as 040656 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW10L-008; The Welding Repair Report (WRR) was B-WR15468. ZPMC QC is identified as Mr. Zhou Peng. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1.

### Segment #10BW

Repair Welding.

This QA inspector observed, ZPMC qualified welding personnel identified as 046709 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW10L-009; The Welding Repair Report (WRR) was B-WR15477. ZPMC QC is identified as Mr.Zhou Peng. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1

# Segment # 10CW

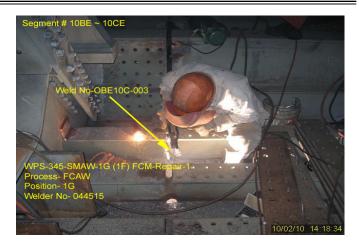
During random visual inspection this Caltrans Quality Assurance (QA) inspector observed that ZPMC personnel had performed heat straightening on various locations on T-Rib Hold Back Weld area Side plate in OBG segment 10CW at panel point 94. ZPMC QC is identified as Mr. Wang Zhu the variables recorded by QC appeared to comply with the Heat Straightening Report (HSR) was HSR1 (B) 9478. See the attached Photo.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Prabhune, Manoj	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer